

REMARKS

Claims 40-57 and 74 are all the claims pending in the application, and have been rejected under 35 U.S.C. § 103 as being obvious over Gu et al. The claims are amended for precision and the rejection is traversed.

In general, Applicants do not take issue with the Examiner's discussion of the elements shown in Fig. 7C of Gu. However, the invention is distinguished in that the attenuation found in Gu serves no control function, and is not subject to feedback control, as in the invention. As disclosed throughout the specification, the laser system of the invention operates in a manner so as to produce constant energy pulses, and does so by controlling the attenuation at the amplifier input. Gu manifestly teaches nothing of the sort. Specifically, Gu does not teach using controlled attenuation before the amplifier to make a laser that gives constant energy pulses as the repetition rate varies. Indeed, Gu directly states that in his system there is "an engineering tradeoff between the energy of a given pulse, the number of pulses, and the repetition rate".

The noted distinction is now better captured in the claims by the clarification of claim 40 to specify that the attenuating device is controlled to compensate for changes in amplifier gain, so that the pulse energy is impervious to changes in repetition rate and/or seed pulse amplitude. Claim 50 is similarly amended.

Claim 43 has been amended to indicate the wavelength control/feedback mechanism more clearly. Although the Examiner rejected claims 43 – 49, a study of Gu indicates that it contains no responding disclosure.

Finally, claim 74 remains unamended, as Applicants find no disclosure whatever in Gu of a controller which cuts the pump diode current when the repetition rate is not properly

controlled. This acts as important safety mode if, e.g., the mode-locked laser fails to operate properly.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

/Richard Turner/
Richard C. Turner
Registration No. 29,710

Date: August 15, 2007